

Claims:

Claim 1-9 (cancelled)

- 5 10 (new). A fixed wireless network extender (FWNE) device comprising:
 one processor unit
 a plurality of system buses
 one control unit monitors and controls the performance of the radio units
 a plurality of wireless networking radio units
10 a plurality wired networking units
 wherein processor unit running system software and computer networking
 software; and
 Whereby said a plurality of wireless networking radio units are attached to
 said system buses; and
15 Whereby said a plurality of wireless networking radio units may be attached to
 said system buses via interface means; and

Whereby said a plurality of wired networking units are attached to said system
buses.

- 20 11 (new). The FWNE device of claim 10 wherein the processor unit having
 networking features means for processing computer networking packets
 among said wireless networking radio units and wired networking units.
12 (new). The FWNE device of Claim 10 wherein having selective number and
 type of said wireless networking radio units for different networking
25 applications.
13 (new). The FWNE device of Claim 10 wherein said wireless networking radio
 units having same type and working at different RF channels.

14 (new). The FWNE device of Claim 10 wherein said wireless networking radio units having same type and working with different RF isolation means for avoiding self-interference.

5 15 (new). The FWNE device of Claim 10 wherein the radio control unit is an optional unit for said wireless network radio units needing additional hardware controls

16 (new). The FWNE device of Claim 10 wherein said wireless networking radio units are built on the same PCB.

10 17 (new). The FWNE device of Claim 16 wherein having configuration means for turning on and off each said wireless networking radio units.

18 (new). Apparatus according to claim 10 for interconnecting a plurality of networks, comprising:

one said FWNE device of claim 10 having a plurality of said wireless networking radio units; and

15 communicating a plurality of said wireless networking radio units to remote correspondent wireless networking radio and the networks behind them; and

said FWNE device performing as central networking feature means for the networking communication among all the said remote wireless networking radio and the networks behind them.

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19 (new). Apparatus according to claim 18 wherein one of the said remote networks is the main network.

20 (new). Apparatus according to claim 10 for interconnecting a plurality of networks, comprising:

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having a said FWNE device of claim 10 configured with a plurality of said wireless networking radio units; and

communicating a plurality of said wireless networking radio units to remote
correspondent wireless networking radio and the networks behind them;
and

5 having a said FWNE device of claim 10 configured with a plurality of said
wired networking units; and
connecting a plurality of said wired networking units to correspondent wired
networks; and

10 said FWNE device performing as central networking feature means for the
networking communication among all the said remote wireless networking
radio and the networks behind them.

21 (new). Apparatus according to claim 20 wherein one of the said remote
networks is main network.

22 (new). Apparatus according to claim 20 wherein one of the said wired
networks is main network.